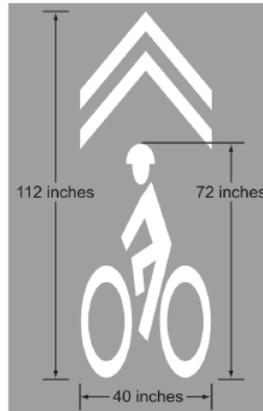


SHARED LANE MARKINGS

Figure 9C-9. Shared Lane Marking
(Delaware Revision)



The information and opinions in this response have been prepared by the Delaware Department of Transportation's (DelDOT) Local Systems Improvement section and are subject to change/modification without notice. The contents of this response are believed to be accurate at the time of date of issuance. This response is for informational use only as well to provide general information and general understanding of current DelDOT's policies, not to provide specific advice and/or influences. This response shall not be used as a substitute for the Delaware Manual on Uniform Traffic Control Devices (DE MUTCD) and/or other DelDOT publications. DelDOT accepts no liability for any direct, indirect or loss or damages arising in any way from the use of or placed on this response for any purpose.

Shared Lane Makings also known as "Sharrows" are in the Delaware Manual on Uniform Traffic Control Devices (DE MUTCD) under Part 9; Traffic Control for Bicycle Facilities, page 9C-20. This is located at https://deldot.gov/Publications/manuals/de_mutcd/index.shtml. The following information is from the *Delaware Manual on Uniform Traffic Control Devices for Streets and Highways 2011 Edition*, last revised May 2018. The purpose of traffic control devices is to promote highway safety of all users on streets, highways, bikeways and roads open to the public. When used in the DE MUTCD, the text headings of Standard, Guidance, Option and Support shall be defined as;

- A. **Standard**—a statement of required, mandatory, or specifically prohibitive practice regarding a traffic control device. All Standard statements are labeled, and the text appears in bold type. The verb "shall" is typically used. The verbs "should" and "may" are not used in Standard statements. Standard statements are sometimes modified by Options.
- B. **Guidance**—a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate. All Guidance statements are labeled, and the text appears in unbold type. The verb "should" is typically used. The verbs "shall" and "may" are not used in Guidance statements. Guidance statements are sometimes modified by Options.
- C. **Option**—a statement of practice that is a permissive condition and carries no requirement or recommendation. Option statements sometime contain allowable modifications to a Standard or Guidance statement. All Option statements are labeled, and the text appears in unbold type. The verb "may" is typically used. The verbs "shall" and "should" are not used in Option statements.
- D. **Support**—an informational statement that does not convey any degree of mandate, recommendation, authorization, prohibition, or enforceable condition. Support statements are labeled, and the text appears in unbold type. The verbs "shall," "should," and "may" are not used in Support statements.

SHARED LANE MARKING OVERVIEW

STANDARD

Shared Lane Markings shall not be used on shoulders or in designated bicycle lanes.

GUIDANCE

The Shared Lane Markings placement are:

- The Shared Lane Marking should not be placed on roadways that have a speed limit above 35-mph.
- The Shared Lane Marking should only be placed on roadways with on-street parallel parking. Also see Support Statement.
- If used in a shared lane with on-street parallel parking, Shared Lane Markings should be placed so that the centers of the markings are at least 11-feet from the face of curb or from the edge of pavement where there is no curb.
- If used on a street without on-street parking that has an outside travel lane that is less than 14-feet wide, the centers of the markings should be a least 4-feet from the face of curb or from the edge of pavement where there is no curb.
- If use, Shared Lane Markings should be placed in locations that directs the bicyclist away from the door zone of parked vehicles and to keep the shared lane marking outside the vehicular wheel path.
- If use, the Shared Lane Marking should be placed immediately after an intersection and spaced at intervals not greater than 250-feet thereafter.
- Section 9B.06 describes a Bicycle May Use Full Lane sign that may be used in addition to or instead of the Shared Lane Marking to inform road users that bicyclists might occupy the travel lane.

OPTIONS

The Shared Lane Markings may be used are to:

- Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist's impacting the open door of a parked vehicle.
- Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane.
- Alert road users of the lateral location bicyclists are likely to occupy within the traveled way.
- Encourage safe passing of bicyclists by motorists.
- Reduce the incidence of wrong-way bicycling.

SUPPORT STATEMENT

Studies related to the Shared lane Marking have primarily shown benefits in the reduction of “dooring” related crashes in urban areas where on-street parking is present and lateral positioning of bicycles is a concern. There have been no significant studies to date showing benefits from the placement of the Shared Lane Marking on rural or other types of roadways where parking does not exist and therefore driver comprehension of these markings is a concern.

CONCLUSION

When shared lane markings were implemented by DelDOT in August 2012, it was opposed to install the markings without on-street parking (See Appendix A). Since the initial installation, Delaware motorists and bicyclists have become familiar with them, where now DelDOT has installed the markings beyond the on-street parking guidance. There has been an appeal to add shared lane markings to raise awareness of bicycling activity or placed on low stress streets but there does not appear to be any research showing the benefits in doing this. The general point of shared lane markings is to help bicycle positioning and reducing dooring crashes. At the time when the shared lane markings were installed in Dover under a Pavement & Rehabilitation contract along various roads within the City of Dover, these marking were coordinated with the City of Dover where DelDOT was consistent with the current federal and state MUTCD at that time. During the design process of the Senator Bikeway Project Phase 1, the shared lane markings were recommended to DelDOT as a request to implement a recommendation of the Dover Bicycle Plan (the plan that was current at that time). It is not believed the current Dover Bicycle Plan recommends removing the the lane markings. This effort was to complete the link from the Senator Bikeway which enters the City from the west to the Capital City Trail within Silver Lake Park, which connects to SR10. The City Manager at that time was in favor of the shared lane markings on the City streets. After coordinating with stakeholders it was determined by DelDOT the shared lane markings could be used for that reason and still follow the Delaware MUTCD manual. Having two separate types of marking for shared lane and designating a segment of roadway as a bikeway is something DelDOT is not in favor of on state maintained roadways.

APPENDIX A – SHARED LANE USE MARKING POLICY, AUGUST 2012



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
800 BAY ROAD
P.O. BOX 778
DOVER, DELAWARE 19903

SHAILEN P. BHATT
SECRETARY

MEMORANDUM

TO: Natalie Barnhart,
Director of Transportation Solutions

VIA: Don Weber, 
Chief Traffic Engineer

FROM: Mark Luszcz, 
Assistant Chief Traffic Engineer

DATE: August 28, 2012

SUBJECT: Shared Lane Use Marking Policy

DeIDOT considers and implements when possible appropriate bicycle facilities on all projects. Larger projects such as widening projects, new alignments, new property access points, etc., typically include either a separate bicycle lane, shared use path, or both. On maintenance type projects such as re-paving, the opportunities for new facilities are limited. Within the existing roadway limits, roadway striping modifications are investigated, in addition to signing modifications. Successful recent examples of this latter category include Glasgow Avenue in the Glasgow area and U.S. 13 through Dover.

We have received several requests to include the new "shared lane marking," also known as the "sharrow," on existing roads and within the limits of re-paving projects. We are currently considering and implementing Sharrows in some downtown, urban corridors that include on-street parking. However, at this time, DeIDOT is opposed to installing Sharrows on roads without parallel parking. We are hopeful the bicycling community in Delaware will understand the following reasons for our position.



Natalie Barnhart

Page 2

August 28, 2012

We have reviewed the research on these markings, and it was primarily conducted in downtown locations that included on-street parking. At this point in time, we will consider using the sharrow in these situations. DelDOT will soon install Sharrows in downtown Dover as part of a re-paving project. The City of Wilmington has installed a few on Market Street already. Despite the allowable 35 mph posted speed limit in some applications, we are not aware of any research related to Sharrows on suburban corridors without on-street parking. We have concerns that lack of public awareness and lack of research will lead to unintended consequences, such as sideswipe vehicle crashes, if Sharrows are applied in areas beyond those for which research was undertaken.

Since Delaware drivers are not yet familiar with Sharrows, DelDOT is working on a public relations effort related to Sharrows, to help educate the public. In the research we reviewed, a significant number of drivers and bicyclists surveyed did not understand the intent of the sharrow. Many thought it indicated an exclusive bike lane while others thought it meant that bikes have priority.

At this time we will consider the installation of Sharrows primarily in downtown areas with on-street parking. Once Delaware bicyclists and drivers become familiar with these installations and after public relations efforts take hold, we can consider more widespread installation of these markings. Once public relations efforts have been made, we plan to identify a suburban corridor without parking to use as a pilot project for Sharrows that we can monitor.

ML: sb